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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,352	07/29/2003	Masahiko Asano	056208.52612US	4499

7590 03/14/2005  
Crowell & Moring LLP  
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Intellectual Property Law Gr.  
1001 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2595

EXAMINER
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ZARROLI, MICHAEL C

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/628,352	ASANO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael C. Zarroli	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5, 7 and 9-15 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6 and 8 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. Previous drawing objection have been overcome. Remember, corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Drawing corrections are no longer held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the bonding wire connection *between the plug pins and PCB* must be shown or the feature(s) canceled from the claims (e.g. claim 1). Also, the bonding wires being *members of a flexible cable* must also be shown or the features captured from the claims (e.g. claim 3). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.** Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the

replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. **The objection to the drawings will not be held in abeyance.**

### *Specification*

3. Objections from the previous office action have been overcome.

### *Claim Objections*

4. Objections from the previous office action have been overcome.

### *Response to Arguments*

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

6. Previous rejections have been overcome.

***Claim Rejections - 35 USC § 103***

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 4, 6, 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Aoike et al.

Aoike discloses (device for controlling a vehicle is intended use and not given patentable weight): a housing (2); a rectangular printed circuit board (1) fixed to the inside of said housing (fig. 1) and having a control circuit thereon (col. 3 lines 57-58); and a plurality of plugs (3) provided along the rectangular printed circuit board (fig. 2) to transfer signals between the inside and the outside of said housing; wherein said plugs respectively contain plug pins (41) and the plug pins are electrically connected to said printed circuit board via bonding wires (6) inside said housing.

Aoike does not disclose that the plugs are on one side of the PCB.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the location of the two plugs of Aoike to only be on one side of the PCB. The motivation for this change could be to accommodate a different location for placement of the case; some locations would require that the plugs be on only one side. Shifting the location of parts is not grounds for patentability *In re Japikse*, 181 F.2d 1019, 1023, 86 USPQ 70, 73 (CCPA 1950)

Regarding claim 2 Aoike discloses that the printed circuit board is rectangular and said plugs are arranged on said printed circuit board along the longitudinal side thereof (fig. 2).

Regarding claim 4 Aoike discloses that said plugs comprise a first plug that transfers signals and a second plug that transfers signals (preamble claim 1). No patentable weight is given to the recitation of intended use that the plugs transfer engine or vehicle control signals

Regarding claim 6 Aoike discloses that the printed circuit board has a control circuit made up with modules, which perform preset functions (col. 3 lines 56+).

***Allowable Subject Matter***

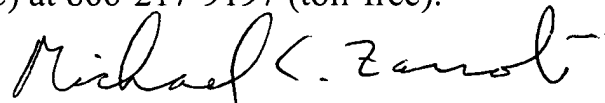
10. Claims 5, 7 and, 9-15 are allowed over the prior art of record.
11. Claim 3 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. The following is a statement of reasons for the indication of allowable subject matter: The combination of claim 3 with 1 specifically the bonding wires being part of a flex cable.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 571-272-2101. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T.C. Patel can be reached on (571) 272-2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Zarroli  
Primary Examiner  
Art Unit 2839

MCZ  
MCZ